(12) **INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)**

(71) **Applicant and**
(72) **Inventor:** OLĘDZKI, Wiesław, Julian [PL/PL]; ul. Lipowa 18a m 2, PL-15-427 Bialystok (PL).

(54) **Title:** VEHICLE SUSPENSION SYSTEM, PARTICULARLY FOR ROAD AND OFF-ROAD VEHICLES
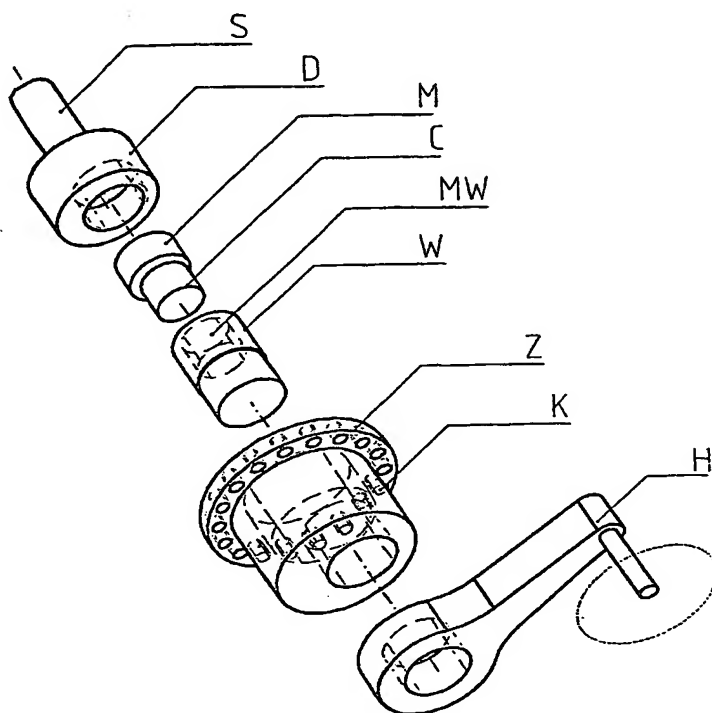
(57) **Abstract:** This invention relates to vehicle suspension, destined particularly for heavy road and off-road vehicles, and first of all for those whose weight and dynamical loads vary within a broad range during the operating process, and is particularly concerned with improvements to the suspension characteristic, i.e. suspension stiffness as a function of axle deflection. The suspension according to the invention is distinguished for the fact that it comprises at least one flat or spatial four-link mechanism (K), (M), (W) and (D) three kinematic pairs of which are rotational ones and one is a rotational or a sliding one, wherein two links of said mechanism are made in the form of eccentric and one link is made in the form of eccentric or slider, wherein one of the links of said mechanism is coupled with vehicle's wheel, another link of the mechanism is coupled with a spring (S), and the whole mechanism is mounted to the vehicle frame using yet another of its links, to get a non-linear differentiable dependence of the suspension stiffness on the vehicle wheel deflection.